

Layer (type)	Output Shape	Param #
input_1 (InputLayer)	(None, 1)	0
lambda_1 (Lambda)	(None, 512)	0
dense_1 (Dense)	(None, 128)	65664
dropout_1 (Dropout)	(None, 128)	0
dense_2 (Dense)	(None, 1)	129
Total params: 65,793		
Trainable params: 65,793		
Non-trainable params: 0		

Train on 400000 samples, validate on 100000 samples

Epoch 1/50
400000/400000 [=====] - 783s 2ms/step - loss: 0.3180 - acc: 0.8618 - val_loss: 0.2948 - val_acc: 0.8743
Epoch 2/50
400000/400000 [=====] - 764s 2ms/step - loss: 0.2809 - acc: 0.8806 - val_loss: 0.2715 - val_acc: 0.8858
Epoch 3/50
400000/400000 [=====] - 765s 2ms/step - loss: 0.2565 - acc: 0.8931 - val_loss: 0.2435 - val_acc: 0.9004
Epoch 4/50
400000/400000 [=====] - 766s 2ms/step - loss: 0.2352 - acc: 0.9033 - val_loss: 0.2242 - val_acc: 0.9091
Epoch 5/50
400000/400000 [=====] - 765s 2ms/step - loss: 0.2154 - acc: 0.9128 - val_loss: 0.2042 - val_acc: 0.9185
Epoch 6/50
400000/400000 [=====] - 752s 2ms/step - loss: 0.1974 - acc: 0.9205 - val_loss: 0.1831 - val_acc: 0.9281
Epoch 7/50
400000/400000 [=====] - 761s 2ms/step - loss: 0.1815 - acc: 0.9274 - val_loss: 0.1650 - val_acc: 0.9373
Epoch 8/50
400000/400000 [=====] - 761s 2ms/step - loss: 0.1672 - acc: 0.9340 - val_loss: 0.1493 - val_acc: 0.9444
Epoch 9/50
400000/400000 [=====] - 764s 2ms/step - loss: 0.1539 - acc: 0.9396 - val_loss: 0.1371 - val_acc: 0.9485
Epoch 10/50
400000/400000 [=====] - 766s 2ms/step - loss: 0.1427 - acc: 0.9444 - val_loss: 0.1253 - val_acc: 0.9542
Epoch 11/50
400000/400000 [=====] - 761s 2ms/step - loss: 0.1315 - acc: 0.9489 - val_loss: 0.1148 - val_acc: 0.9582
Epoch 12/50
400000/400000 [=====] - 766s 2ms/step - loss: 0.1232 - acc: 0.9521 - val_loss: 0.1026 - val_acc: 0.9645
Epoch 13/50
400000/400000 [=====] - 780s 2ms/step - loss: 0.1150 - acc: 0.9559 - val_loss: 0.0933 - val_acc: 0.9685
Epoch 14/50
400000/400000 [=====] - 761s 2ms/step - loss: 0.1075 - acc: 0.9590 - val_loss: 0.0908 - val_acc: 0.9682
Epoch 15/50
400000/400000 [=====] - 767s 2ms/step - loss: 0.1010 - acc: 0.9613 - val_loss: 0.0759 - val_acc: 0.9756
Epoch 16/50
400000/400000 [=====] - 764s 2ms/step - loss: 0.0955 - acc: 0.9638 - val_loss: 0.0732 - val_acc: 0.9758
Epoch 17/50
400000/400000 [=====] - 759s 2ms/step - loss: 0.0898 - acc: 0.9662 - val_loss: 0.0652 - val_acc: 0.9791
Epoch 18/50
400000/400000 [=====] - 761s 2ms/step - loss: 0.0851 - acc: 0.9677 - val_loss: 0.0590 - val_acc: 0.9817
Epoch 19/50
400000/400000 [=====] - 764s 2ms/step - loss: 0.0806 - acc: 0.9697 - val_loss: 0.0601 - val_acc: 0.9817
Epoch 20/50
400000/400000 [=====] - 766s 2ms/step - loss: 0.0770 - acc: 0.9711 - val_loss: 0.0538 - val_acc: 0.9838
Epoch 21/50
400000/400000 [=====] - 761s 2ms/step - loss: 0.0729 - acc: 0.9728 - val_loss: 0.0508 - val_acc: 0.9844
Epoch 22/50
400000/400000 [=====] - 770s 2ms/step - loss: 0.0695 - acc: 0.9741 - val_loss: 0.0452 - val_acc: 0.9868
Epoch 23/50
400000/400000 [=====] - 761s 2ms/step - loss: 0.0672 - acc: 0.9748 - val_loss: 0.0454 - val_acc: 0.9858
Epoch 24/50
400000/400000 [=====] - 762s 2ms/step - loss: 0.0641 - acc: 0.9761 - val_loss: 0.0444 - val_acc: 0.9863
Epoch 25/50
400000/400000 [=====] - 766s 2ms/step - loss: 0.0611 - acc: 0.9774 - val_loss: 0.0426 - val_acc: 0.9866
Epoch 26/50
400000/400000 [=====] - 764s 2ms/step - loss: 0.0597 - acc: 0.9779 - val_loss: 0.0397 - val_acc: 0.9882
Epoch 27/50

400000/400000 [=====] - 765s 2ms/step - loss: 0.0571 - acc: 0.9790 - val_loss: 0.0369 - val_acc: 0.9892
Epoch 28/50
400000/400000 [=====] - 761s 2ms/step - loss: 0.0548 - acc: 0.9797 - val_loss: 0.0319 - val_acc: 0.9917
Epoch 29/50
400000/400000 [=====] - 729s 2ms/step - loss: 0.0527 - acc: 0.9806 - val_loss: 0.0311 - val_acc: 0.9911
Epoch 30/50
400000/400000 [=====] - 763s 2ms/step - loss: 0.0514 - acc: 0.9810 - val_loss: 0.0332 - val_acc: 0.9902
Epoch 31/50
400000/400000 [=====] - 765s 2ms/step - loss: 0.0496 - acc: 0.9816 - val_loss: 0.0334 - val_acc: 0.9900
Epoch 32/50
400000/400000 [=====] - 765s 2ms/step - loss: 0.0484 - acc: 0.9822 - val_loss: 0.0286 - val_acc: 0.9914
Epoch 33/50
400000/400000 [=====] - 726s 2ms/step - loss: 0.0475 - acc: 0.9827 - val_loss: 0.0259 - val_acc: 0.9929
Epoch 34/50
400000/400000 [=====] - 733s 2ms/step - loss: 0.0461 - acc: 0.9831 - val_loss: 0.0235 - val_acc: 0.9941
Epoch 35/50
400000/400000 [=====] - 764s 2ms/step - loss: 0.0449 - acc: 0.9836 - val_loss: 0.0219 - val_acc: 0.9946
Epoch 36/50
400000/400000 [=====] - 765s 2ms/step - loss: 0.0433 - acc: 0.9842 - val_loss: 0.0219 - val_acc: 0.9945
Epoch 37/50
400000/400000 [=====] - 765s 2ms/step - loss: 0.0427 - acc: 0.9845 - val_loss: 0.0206 - val_acc: 0.9949
Epoch 38/50
400000/400000 [=====] - 761s 2ms/step - loss: 0.0424 - acc: 0.9845 - val_loss: 0.0212 - val_acc: 0.9948
Epoch 39/50
400000/400000 [=====] - 765s 2ms/step - loss: 0.0405 - acc: 0.9852 - val_loss: 0.0252 - val_acc: 0.9924
Epoch 40/50
400000/400000 [=====] - 764s 2ms/step - loss: 0.0402 - acc: 0.9853 - val_loss: 0.0205 - val_acc: 0.9948
Epoch 41/50
400000/400000 [=====] - 765s 2ms/step - loss: 0.0383 - acc: 0.9861 - val_loss: 0.0173 - val_acc: 0.9958
Epoch 42/50
400000/400000 [=====] - 759s 2ms/step - loss: 0.0386 - acc: 0.9860 - val_loss: 0.0184 - val_acc: 0.9950
Epoch 43/50
400000/400000 [=====] - 762s 2ms/step - loss: 0.0367 - acc: 0.9867 - val_loss: 0.0167 - val_acc: 0.9959
Epoch 44/50
400000/400000 [=====] - 765s 2ms/step - loss: 0.0371 - acc: 0.9865 - val_loss: 0.0156 - val_acc: 0.9967
Epoch 45/50
400000/400000 [=====] - 760s 2ms/step - loss: 0.0357 - acc: 0.9870 - val_loss: 0.0218 - val_acc: 0.9935
Epoch 46/50
400000/400000 [=====] - 765s 2ms/step - loss: 0.0355 - acc: 0.9871 - val_loss: 0.0156 - val_acc: 0.9961
Epoch 47/50
400000/400000 [=====] - 760s 2ms/step - loss: 0.0345 - acc: 0.9874 - val_loss: 0.0183 - val_acc: 0.9947
Epoch 48/50
400000/400000 [=====] - 763s 2ms/step - loss: 0.0335 - acc: 0.9878 - val_loss: 0.0178 - val_acc: 0.9952
Epoch 49/50
400000/400000 [=====] - 760s 2ms/step - loss: 0.0335 - acc: 0.9880 - val_loss: 0.0180 - val_acc: 0.9952
Epoch 50/50
400000/400000 [=====] - 760s 2ms/step - loss: 0.0333 - acc: 0.9878 - val_loss: 0.0206 - val_acc: 0.9936
50000/50000 [=====] - 71s 1ms/step

Test score: 0.011744193750852719

Test accuracy: 0.99692

